

REMARKS

Applicant hereby requests further examination of the subject application in view of the amendments and remarks presented herein. Applicant has canceled all pending claims 1-51 and has presented nine new claims which represent dependent claims rewritten in independent form including all limitations of the claims from which each depends. The table below identifies the canceled claim to which each new claim corresponds:

New Claim	Canceled Claim
52	14
53	21
54	29
55	16
56	23
57	31
58	41
59	44
60	48

The Examiner made a statement regarding references listed in the specification and not mentioned or listed in the information disclosure statement (IDS) submitted with the patent application. Applicant has compared the listing in the background of the specification with the IDS listing and has provided a supplemental IDS, including the required fee, in compliance with the Examiner's request.

The Examiner objected to claim 37 as being improper multiple dependent form. Claim 37 has been canceled, rendering moot the objection. Applicant respectfully requests withdrawal of the objection.

In a first rejection, the Examiner rejected claims 8, 9, 11, 18, 26, and 36 under 35 USC § 112, second paragraph, as being indefinite. Claims 8, 9, 11, 18, 26, and 36 have been canceled, rendering moot the first rejection. Applicant respectfully requests withdrawal of the first rejection.

In a second rejection, the Examiner rejected claims 1-6, 9-12, 15, 17-19, 22, 24, 34-40, and 51 under 35 USC § 102(b) as being anticipated by Moore, et al. All of claims 1-6, 9-12, 15, 17-19, 22, 24, 34-40, and 51 have been canceled, rendering moot the second rejection. Applicant respectfully requests withdrawal of the second rejection.

In a third rejection, the Examiner rejected claims 1-6, 9-12, 15, 17-19, 22, 24, 34-40, and 51 under 35 USC § 102(e) as being anticipated by Moore, et al. All of claims 1-6, 9-12, 15, 17-19, 22, 24, 34-40, and 51 have been canceled, rendering moot the third rejection. Applicant respectfully requests withdrawal of the third rejection.

In a fourth rejection, the Examiner rejected claims 35-40 and 51 under 35 USC § 102(e) as being anticipated by Chen, et al. All of claims 35-40 and 51 have been canceled, rendering moot the fourth rejection. Applicant respectfully requests withdrawal of the fourth rejection.

In a fifth rejection, the Examiner rejected claims 7, 13, 20, 25-28, 30 and 32-33 under 35 USC § 103(a) as being unpatentable over Moore, et al in view of Fritzemeier, et al. All of claims 7, 13, 20, 25-28, 30 and 32-33 have been canceled, rendering moot the fifth rejection. Applicant respectfully requests withdrawal of the fifth rejection.

In a sixth rejection, the Examiner rejected claims 16, 23, 31, and 41 under 35 USC § 103(a) as being unpatentable over Moore, et al in view of Fritzemeier, et al. and Goyal, et al. Claims 16, 23, 31, under 41 have been canceled, and replaced by claims 55-58 as shown in the table above. Applicant respectfully traverses the rejection because the overlapping buffer compositions LaNiO_3 , SrRuO_3 , have been canceled from the claims. The remaining buffer compositions $\text{La}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$, LaCoO_3 , $\text{La}_{0.5}\text{Sr}_{0.5}\text{TiO}_3$, and La_2CuO_4 are not taught in the cited references. Applicant respectfully contends that the cited combination of references does not provide sufficient teaching to lead a person of ordinary skill in the art to produce the invention as claimed in new claims 55-58. Applicant therefore respectfully requests withdrawal of the sixth rejection.

In a seventh rejection, the Examiner rejected claims 42-50 under 35 USC § 103(a) as being unpatentable over Moore, et al in view of Fritzemeier, et al., Goyal, et al., and Chen, et al. Claims 42-50 have been canceled; claims 44 and 48 have been replaced by claims 59 and 60 as shown in the table above. Applicant respectfully traverses the rejection because the overlapping buffer compositions LaNiO_3 , SrRuO_3 , have been canceled from the claims. The remaining, claimed buffer compositions $\text{La}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$, LaCoO_3 , $\text{La}_{0.5}\text{Sr}_{0.5}\text{TiO}_3$, and La_2CuO_4 are not taught in the cited references. Applicant respectfully contends that the cited combination of references does not provide sufficient teaching to lead a person of ordinary skill in the art to produce the invention as claimed in new claims 59 and 60. Applicant therefore respectfully requests withdrawal of the seventh rejection.

In an eighth rejection, the Examiner rejected claims 1-7, 9-13, 15-17, 19-20, 22-24, 35-36, and 38-45 on the ground of obviousness-type double-patenting over claims 1-6, 8-14, and 16-18 of U.S. Patent No. 6,872,988 ('988) in view of Moore, et al. and/or Chen, et al. Claims 1-7, 9-13, 15-17, 19-20, 22-24, 35-36, and 38-45 have been canceled; claims 16, 23, 41 and 44 have been replaced by claims 55, 56, 58 and 59 as shown in the table above. Applicant respectfully traverses the rejection because the claimed buffer compositions $\text{La}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$, LaCoO_3 , $\text{La}_{0.5}\text{Sr}_{0.5}\text{TiO}_3$, and La_2CuO_4 are not taught in the cited references. Applicant respectfully contends that none of the claims in '988 recite the claimed buffer compositions. Applicant further contends that the cited combination of references does not provide sufficient teaching to lead a person of ordinary skill in the art to produce the invention as claimed in new claims 55, 56, 58 and 59. Applicant therefore respectfully requests withdrawal of the eighth rejection.

The examiner stated that claims 14, 21, and 29 were objected to as being dependent on a rejected base claim but would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims. Claims 14, 21, and 29 have been canceled and replaced with new claims 52, 53, and 54 as shown in the table above. Applicant has restructured the claims but they contain all of the limitations of the original claims from which they originally depended.

Applicants earnestly solicit allowance of claims 52-60, and the issue of U.S. letters patent therefor. Applicant has made every effort to present claims which clearly distinguish over the cited art, and it is believed that all pending claims are now in condition for allowance. However, applicant requests that the Examiner call the undersigned (direct line 865-574-4178) if anything further is required by the Examiner prior to issuance of a Notice of Allowance for all claims.

Respectfully Submitted,

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